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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,321	08/30/2001	Stuart A. Sanders	01 - 414	8735

7590

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EXAMINER

JACKSON, ANDRE L

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/943,321

Applicant(s)

SANDERS ET AL.

Examiner

Andre' L. Jackson

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 November 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 10 November 2003. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☐ The proposed amendment(s) will not be entered because:  
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See 10 below.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 16.

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-15 and 17-24.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_  
10. ☒ Other: See Continuation Sheet(s)



Anthony Knight  
Supervisory Patent Examiner

Continuation of 10. See attached sheet(s).

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Applicant's arguments presented in the request for reconsideration is found not to be persuasive. In particular, applicant asserts that the obvious-type rejection made by the Examiner must provide a motivation or reasoning to alter one reference in view of the other, which in this case Forrester et al is used as a base reference, inherently meeting all of the claimed limitations of applicant's claims and Culler et al is used as a secondary teaching directed to a method of producing a coated abrasive article (used broadly to incorporate an air seal.) The inclusion of the Culler et al to make the obvious-type rejection was used to show applicant the variety of densified polymer (plastic) resins capable of being bonded to any surface, preferably an abradable metal substrate. In other words, Culler et al explains equivalent polymer materials, including polyimide films or coatings.

However, the Examiner can also take the position of using Forrester et al as an obvious-type rejection alone as a matter of art recognized equivalents and will so be explained below.

In column 3, lines 7-11, Forrester et al discloses that the material in question is an epoxy foam resin. Applicant's claimed invention recites a polyimide foam.

After researching, the Examiner has found that epoxy resins are groups of synthetic resins used to make plastics and adhesives. These materials are noted for their versatility and high resistance to chemicals and outstanding adhesion, durability, and toughness have made them valuable as coatings. Because of their high electrical resistance, durability at high and low temperatures, and the ease with which they can be poured or cast without forming bubbles, epoxy resin plastics are especially useful for encapsulating electrical and electronic components. Epoxy resin adhesives can be used on metals, construction materials, and most other synthetic

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resins. They are strong enough to be used in place of rivets and welds in certain industrial applications.

In comparison, polyimide resins are organic resins. The polyimides exhibit outstanding engineering properties, especially thermal stability. Their introduction in the 1960s made significant contributions to meet exacting demands of industry, aerospace, military and nuclear developments. Subsequently moulding powders, laminating resins, foams and composite materials and especially high performance adhesives became available. Polyimides have exceptional heat resistance, where very high-level mechanical properties can be sustained at temperatures of 250°C or more. Excellent electrical, solvent resistance, flame retardance, abrasion resistance, oxidative and radiation resistance properties have led to a range of critical applications. The possible replacement of some metal and ceramic components shows the extraordinary advances made in the developments of organic plastics within a short time span.

From the facts state above, it is clearly pointed out to one having ordinary skill in the art at the time of applicant's invention that the epoxy foam resin as taught by Forrester et al is indeed a resin equivalent to the polyimide foam resin as recited in applicant's claims and the substitution and or selection of one in view of the other is considered art equivalents well within the level of ordinary skill in the art.